**EDEMA** 

## CBM + ELL

 $Edema \leftrightarrow cardiomegaly \land$ No Edema  $\leftrightarrow \neg$ effusion  $chf \land congestion \land effusion$ 

## PCBM + ELL

 $\textbf{Edema} \leftrightarrow \left( \text{right\_pleural} \land \text{pleural\_unspec} \land \text{right\_diaphragm} \land \text{retrocardiac} \land \neg \text{left\_apical\_lung} \land \neg \text{lung\_bases} \right)$  $\land$  interstitium  $\land$  parenchymal  $\land \neg$ effusion  $\land \neg$ tube  $\land$  process  $\land$  congestion  $\land \neg$ disease  $\land \neg$ calcification  $\land$  engogement  $\land$  ¬elevation  $\land$  ¬degenerative  $\land$  ¬scar  $\land$  ¬emphysema  $\land$  ¬hernia  $\land$  pressure  $\land$  chf  $\land$  redistribution)  $\lor$  (pleural\_unspec  $\land \neg$  right\_diaphragm  $\land$  interstitium  $\land \neg$  stomach  $\land$  effusion  $\land$  process  $\land$  congestion  $\land$  engogement  $\land$  ¬elevation  $\land$  ¬degenerative  $\land$  ¬scar  $\land$  ¬emphysema  $\land$  ¬  $\land$  chf  $\land$  redistribution)  $\lor$  (pleural\_unspec  $\land$  ¬right\_diaphragm  $\land$  ¬retrocardiac  $\land$  interstitium  $\land$  ¬stomach  $\land$  effusion  $\land$  tube  $\land \neg$ process  $\land$  congestion  $\land$  engogement  $\land \neg$ elevation  $\land \neg$ degenerative  $\land \neg$ scar  $\land \neg emphysema \land pressure \land chf \land redistribution) \lor \left(\neg right\_pleural \land pleural\_unspec \land \neg right\_diaphragm \right)$  $\land \neg retrocardiac \land \neg left\_apical\_lung \land right\_lower\_lung \land lung\_bases \land interstitium \land parenchymal \land \neg stomach$  $\land$  effusion  $\land \neg$ tube  $\land$  process  $\land$  abnormality  $\land$  congestion  $\land$  cardiomegaly  $\land$  disease  $\land \neg$ calcification  $\land$  engorgement  $\land$  ¬elevation  $\land$  ¬degenerative  $\land$  ¬scar  $\land$  ¬emphysema  $\land$  ¬hernia  $\land$  pressure  $\land$  chf  $\land$  redistribution)  $\lor$  (right\_pleural  $\land$  pleural\_unspec  $\land \neg$ right\_diaphragm  $\land$  retrocardiac  $\land \neg$ left\_apical\_lung  $\land$  right\_lower\_lung  $\land \neg$  lung\_bases  $\land$  interstitium  $\land$  parenchymal  $\land \neg$ stomach  $\land$  effusion  $\land$  tube  $\land$  process  $\land$  abnormality  $\land$  line  $\land$  congestion  $\land$  cardiomegaly  $\land$  disease  $\land$  ¬calcification  $\land$  engorgement  $\land$  ¬elevation  $\land$  ¬degenerative  $\land$  ¬scar  $\land$  ¬emphysema  $\land$  ¬hernia  $\land$  pressure  $\land$  chf ∧ ¬redistribution)

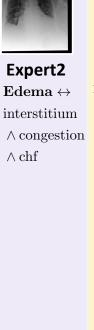


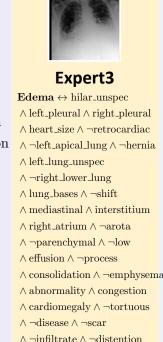
 $\land \neg elevation \land \neg wire$ 

 $\land \neg deformity \neg hernia$ 

 $\land$  widen  $\land$  infiltrate

∧ ¬emphysema

















CBM + ELL No Pneumonia  $\leftrightarrow$  right\_diphragm

PCBM + ELL No Pneumonia  $\leftrightarrow \neg$ consolidation



Expert1 Pneumonia  $\leftrightarrow$ opacity  $\wedge$ consolidation



Expert2 Pneumonia  $\leftrightarrow$ opacity



Expert3 Pneumonia  $\leftrightarrow$ consolidation



Expert4 Pneumonia  $\leftrightarrow$ opacity

